Index of Claims

| Application/Control No. | Applicant(s)/Patent under Reexamination | |
|-------------------------|---|--|
| 10/795,978 | TAKANO ET AL. | |
| Examiner | Art Unit | |

(Through numeral) Cancelled Rejected Restricted Allowed

Non-Elected N Interference

C. J. Arbes

Appeal 0 Objected

3729

| | | | <u> </u> | | | | J | | | <u>L</u> | |
|----------|---|------------|----------|---------------------------|------------|----------|-------------------------------------|----------|----------|--------------|---|
| | | | | | | | | | | | |
| Cla | im | Date | | | | | | | | | Į |
| Final | Original | 11/30/06 | 90/2// | 12/1/06 | 3/16/07 | | | | | | |
| | | r | V | e | \ <u>\</u> | _ | | _ | _ | ļ. | |
| | 2 | е | V | × | V | | | | | | |
| \vdash | 3 | s | V | _ | V | - | | | \vdash | Г | |
| | 4 | t | V | p | V | | | | | Г | |
| | 5 | ٢ | V | a | | | | Ι- | | Г | ۱ |
| | 6 | i | n | c | | | | | | | ١ |
| | 7 | С | n | c | | | | | | | |
| | 1 2 3 4 5 6 7 8 | ŧ | n | c | | Г | | Γ | | | ١ |
| | 9 | i | n | c | | | | | | Г | ĺ |
| | 10 | 0 | n | n | | | | | | | |
| | 11 | | V | ٦ | 1 | | | | | | |
| | 12 | | ~ | t | 8 | L | | | | | Į |
| | 13 | | 6 | е | 1 | | 匚 | 匚 | L | | Į |
| | 14 | | <u> </u> | | V | _ | <u> </u> | <u> </u> | <u>L</u> | _ | Į |
| L | 15 | | 1 | n | L_ | | _ | Ш | Ш | L | Į |
| | 16 | | _ | | L_ | | _ | _ | | _ | l |
| L | 17 | | | | | L | <u> </u> | Ŀ | _ | _ | Į |
| L | 18 | lacksquare | | $ldsymbol{ldsymbol{eta}}$ | L | _ | <u> </u> | _ | _ | _ | Į |
| | 19 | | L | _ | <u> </u> | _ | _ | _ | _ | <u> </u> | Į |
| | 20 | | | _ | L | _ | | ļ | | _ | Į |
| | 21 | | | | | | <u> </u> | | | \vdash | l |
| ļ | 22 | H | Н | | <u> </u> | ├- | <u> </u> | ├ | ⊢ | ⊢ | l |
| <u> </u> | 23 | | \vdash | \vdash | ⊢ | ┝ | | | <u> </u> | ⊢ | l |
| _ | 24 | - | H | \vdash | | - | _ | H | | - | ł |
| - | 25 | | \vdash | _ | | | - | \vdash | H | _ | l |
| | 27 | H | \vdash | <u> </u> | ┝ | ├ | - | \vdash | ⊢ | ⊢ | l |
| _ | 28 | \vdash | ┢ | | - | - | | \vdash | \vdash | _ | |
| <u> </u> | 29 | - | \vdash | Η. | \vdash | \vdash | _ | - | - | | |
| | 30 | - | | | \vdash | \vdash | | ┢ | - | | |
| _ | 31 | - | \vdash | | \vdash | \vdash | \vdash | - | - | _ | |
| | 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 | Н | \vdash | - | Н | | | H | \vdash | Т | |
| \vdash | 33 | Н | | - | Н | \vdash | | \vdash | \vdash | T- | |
| | 34 | П | П | Т | | | | Т | | Г | ĺ |
| | 34 35 | | П | П | | | | | | | |
| | 36 | | | | | | | | | | |
| | 36 37 | | | | | | | | | | |
| | 38 39 | | | | | | | | | | |
| | 39 | | | | | | | | | | |
| | 40 | | | | | | | | | | |
| | 41 | | | | | | | 匚 | | سا | l |
| | 42 | | | | | | | | | L | |
| | 43 | Ш | Ш | | Ш | Ш | L | <u>L</u> | _ | Щ | |
| | 44 | Щ | Ш | Щ | Щ | L., | L | L_ | _ | Щ | l |
| Щ. | 45 | L. | | | <u> </u> | Щ | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | L_ | | Щ. | l |
| | 46 | _ | Щ | | | ldash | <u> </u> | <u> </u> | <u> </u> | <u> </u> | l |
| | 47 | Щ | Ш | _ | | <u> </u> | | <u> </u> | L- | <u> </u> | l |
| \vdash | 48 | \vdash | Ш | <u> </u> | | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | l |
| ļ | 49 | Щ | Ш | | igwdow | Щ | <u> </u> | <u> </u> | \vdash | Ь., | |
| 1 | 50 | l i | | | | | | ı | | | ı |

| 201700 B 21 S 21 S 22 S 22 S 22 S 24 S 25 S 25 S 25 S 25 S 25 S 25 S 25 S 25 | _ | | Date | <u>—</u> | | | | ۱ ۱ | Cla | im | Γ | | | | Date | | _ | | |
|--|----------|----------|-----------|----------|-----------------|-----------|--------------|-----|----------------|----------|-----------------|----------|----------|---|--------------|--------------|--------------|----------|-----------------|
| 51 | | | | Г | П | Π | | [| | | | | | | | Γ | | | Г |
| 51 | 9 | 6 | | l | 1 | l | l | | _ = | na | | | | | | | | l | |
| 51 | = | 16/ | | | | l | l | | <u>:</u> ≅ | ij | | | | | | l | | ĺ | |
| 52 53 54 56 57 58 56 57 58 56 57 58 56 57 58 59 56 57 58 59 56 57 58 59 50 50 50 50 50 50 50 | ÷ | 9 | | | 1 | l | l | | _ | ō | | | | | | l | l | | |
| 52 53 54 56 57 58 56 57 58 56 57 58 56 57 58 59 56 57 58 59 56 57 58 59 50 50 50 50 50 50 50 | _ | - | <u> </u> | \vdash | \vdash | \vdash | ┝÷ | | | | \vdash | | - | | - | \vdash | \vdash | ├ | \vdash |
| 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 99 98 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 9 | e U | | _ | - | - | \vdash | ⊢ | 1 | | 52 | - | - | _ | | _ | ┢ | - | \vdash | Н |
| 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 99 98 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 9 | | _ | | _ | - | - | ┢ | 1 | | 52 | Н | - | | | - | - | - | | Н |
| 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 99 98 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 9 | _ | | - | - | \vdash | \vdash | ├ | | | 54 | Н | | _ | _ | - | \vdash | _ | - | \vdash |
| 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 98 99 99 98 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 99 98 99 9 | 2 | ľ | \vdash | _ | - | - | ⊢ | | | 55 | - | _ | - | _ | _ | | _ | \vdash | H |
| 58 | | | H | - | - | - | ⊢ | | | 56 | | | \dashv | | _ | H | | \vdash | Н |
| 58 | | - | - | | H | \vdash | ├ | | | 57 | Н | | \dashv | | | ⊢ | - | \vdash | Н |
| 60 61 61 62 62 63 64 64 65 65 66 66 67 68 69 70 70 71 72 73 74 75 75 76 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 90 90 91 91 92 93 93 94 94 95 99 99 99 99 99 99 99 99 99 99 99 99 | | | H | - | - | | ⊢ | | _ | 58 | Н | | | | _ | ┢ | | ⊢ | Н |
| 60 61 61 62 62 63 64 64 65 65 66 66 67 68 69 70 70 71 72 73 74 75 75 76 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 90 90 91 91 92 93 93 94 94 95 99 99 99 99 99 99 99 99 99 99 99 99 | " | | <u> </u> | \vdash | H | \vdash | ┝ | | | 50 | Н | \dashv | - | | — | ⊢ | ┝ | ┢ | Н |
| 61 62 62 63 63 64 64 65 65 66 67 68 68 69 70 71 71 72 72 73 73 74 75 76 76 77 78 80 80 81 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 94 95 99 99 99 99 99 99 99 99 99 99 99 99 | <u></u> | _ | \vdash | | - | \vdash | ⊢ | | | 60 | - | | | | | ┝ | \vdash | ┝ | Н |
| 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 | | ., | - | - | | - | ┢ | | | 61 | Н | | | | | ⊢ | \vdash | ⊢ | Н |
| 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 | <u>'</u> | V | - | | | <u> </u> | ⊢ | | | 62 | Н | | | | <u> </u> | ⊢ | | - | Н |
| 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 | | | - | \vdash | - | ├ | \vdash | | | 62 | \vdash | | | | \vdash | ⊢ | ├ | ├ | \vdash |
| 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 98 | e | | _ | \vdash | \vdash | ├─ | - | | | 64 | H | \vdash | | | \vdash | \vdash | \vdash | \vdash | Н |
| 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 98 | _ | | Ь— | ├ | \vdash | ├ | \vdash | | | 65 | \vdash | | \vdash | | \vdash | \vdash | <u> </u> | | ┝╌┤ |
| 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 98 | 11 | | Ι | - | \vdash | \vdash | \vdash | | | 66 | Н | \vdash | | | | ⊢ | - | ├— | Н |
| 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 98 | _ | | | - | - | | _ | H | | 67 | Н | - | | | _ | ⊢ | | - | Н |
| 70 71 72 73 74 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 93 94 95 96 97 98 99 | _ | - | | \vdash | \vdash | \vdash | \vdash | | | 60 | Н | \vdash | | | - | \vdash | | | Н |
| 70 71 72 73 74 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 93 94 95 96 97 98 99 | _ | _ | | - | ⊢ | ⊢ | \vdash | | | 60 | _ | - | | | | ┢ | \vdash | ├- | Н |
| 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 99 | | | | ┝ | | | | | | 70 | Н | - | | | \vdash | ⊢ | ┝ | - | Н |
| 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 | _ | _ | _ | | | - | _ | | | 70 | | | | | \vdash | ⊢ | ⊢ | ⊢ | Н |
| 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 99 | | | | ┡ | | | \vdash | | - | 71 | Н | \dashv | _ | | <u> </u> | ├ | ├ | ┡ | Н |
| 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 99 | | | _ | - | _ | H | ⊢ | | - | 72 | | | | | - | - | _ | - | Н |
| 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 94 95 96 97 98 | _ | | | <u> </u> | | ⊢ | \vdash | | | 74 | | \dashv | _ | _ | <u> </u> | ┝ | - | ┝ | Н |
| 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 | _ | | | ⊢ | ⊢ | - | - | H | | 75 | Н | _ | | | - | - | <u> </u> | ⊢ | Н |
| 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 | _ | | | - | ⊢ | _ | _ | | | 76 | - | | | _ | - | ┝ | <u> </u> | ⊢ | Н |
| 78 79 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 | | _ | | - | \vdash | \vdash | ⊢ | | - | 70 | - | | | _ | _ | ⊢ | ┝ | | Н |
| 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 | _ | | | | H | ⊢ | _ | | | 70 | | | | | _ | ⊢ | <u> </u> | _ | Н |
| 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 | _ | | | _ | | | | | | 70 | Н | \dashv | | | _ | ┝ | <u> </u> | \vdash | Н |
| 81 82 83 84 85 86 87 88 89 90 91 91 92 93 93 94 95 96 97 98 99 | _ | | | <u> </u> | Н | - | | H | | 79 | Н | \dashv | _ | | _ | | | <u> </u> | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | _ | | | _ | _ | | _ | H | | 00 | | \dashv | _ | | _ | - | _ | ⊢ | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | - | - | \vdash | \vdash | \vdash | \vdash | <u> </u> | | | 07 | Н | \dashv | _ | | <u> </u> | \vdash | ۳ | ├- | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | \dashv | | | - | \vdash | - | - | | | 02 | Н | \dashv | \dashv | | | <u> </u> | <u> </u> | ├— | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | _ | - | _ | \vdash | \vdash | <u> </u> | \vdash | | | 03 | Н | - | | _ | - | - | <u> </u> | <u> </u> | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | 4 | | | \vdash | $\vdash \vdash$ | <u> </u> | - | | | 04 0E | Н | \dashv | - | | - | ├ | | \vdash | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | 4 | | H | \vdash | Н | H | <u> </u> | | | 85 | Н | \dashv | | | | <u> </u> | <u> </u> | <u> </u> | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | _ | \vdash | Ш | \vdash | \vdash | \vdash | Н | | | 80 | Н | \dashv | | _ | - | <u> </u> | <u> </u> | - | Н |
| 89 90 91 92 93 94 95 96 97 98 99 | _ | _ | Ш | \vdash | \vdash | \vdash | \vdash | | | 8/ | \vdash | \dashv | \dashv | _ | \vdash | <u> </u> | μ. | ├- | Н |
| 91 92 93 94 95 95 96 97 98 99 | _ | _ | \vdash | \vdash | Н | \vdash | \vdash | | | 88 | \vdash | \dashv | | _ | \vdash | <u> </u> | Ь. | ├- | Н |
| 91 92 93 94 95 95 96 97 98 99 | _ | | \square | - | | <u> </u> | \vdash | | | 89 | Н | | _ | | ٠., | <u> </u> | L | \vdash | Н |
| 92 93 94 95 95 96 97 98 99 | _ | Щ | \square | Ш | Н | \vdash | <u> </u> | | | 90 | Щ | _ | _ | _ | | <u> </u> | L | L- | Щ |
| 93 94 95 95 96 97 98 99 | 4 | \vdash | Щ | \vdash | \sqcup | <u> </u> | <u> </u> | | | 91 | $\vdash \vdash$ | \dashv | | | | \vdash | Ш | ⊢ | Щ |
| 94 | _ | | Щ | _ | Щ | _ | <u> </u> | | | 92 | \vdash | \dashv | | _ | | | _ | <u> </u> | Н |
| 95 96 97 98 99 99 | 4 | Щ | Ш | \vdash | \vdash | <u> </u> | <u> </u> | | | 93 | \vdash | - | _ | _ | | <u> </u> | Ь. | <u> </u> | $\vdash\dashv$ |
| 96 97 98 98 99 | _ | Щ | Щ. | | Щ | _ | \vdash | | | 94 | \dashv | | _ | | | | \vdash | | $\vdash \vdash$ |
| 97 98 99 | _ | | Щ | \vdash | Щ | | <u> </u> | | | 95 | - | _ | | _ | | L | | Н | Щ |
| 98 99 | _ | - | | <u> </u> | Щ | <u> </u> | <u> </u> | | | 96 | - | | 4 | | | | | | \vdash |
| 99 1 1 1 | 4 | | | | Щ | _ | _ | | | 9/ | _ | _ | | | | L | | ļ | Щ |
| 100 | _ | Ш | Щ | <u> </u> | Щ | L., | <u> </u> | | \Box | 98 | | | _ | | | L_ | \sqcup | <u> </u> | \sqcup |
| | _ | Ш | Ш | Щ | Щ | Щ | Ь., | | | 99 | | _ | _ | | _ | L | _ | Ь | Ш |
| | | | | | L | L | Ш | ı l | | 100 | | | | | | | | | لــا |

| Cli | aim | Date | | | | | | | | |
|----------------|-------------------|--|--------------|-------------------|----------|----------|----------|--------------------|-------------------------------------|-----------------|
| | | | | | | | | | | |
| Final | Original | | | | | | | | | |
| | 101 102 | | | | | | | | _ | |
| <u> </u> | 102 | <u> </u> | _ | _ | _ | _ | ⊢ | - | _ | Н |
| _ | 103 104 | ├- | ⊢ | \vdash | ⊢ | ┝ | ⊢ | ⊢ | _ | - |
| <u> </u> | 105 | ⊢ | \vdash | - | ┢ | - | ┝ | - | H | Н |
| - | 105 | ⊢ | - | | ┝ | - | ⊢ | \vdash | H | Н |
| | 107 | \vdash | ⊢ | ⊢ | ⊢ | Ι | ├ | - | ┝ | \vdash |
| \vdash | 108 | \vdash | \vdash | \vdash | - | - | - | - | | \vdash |
| <u> </u> | 109 | \vdash | \vdash | \vdash | H | \vdash | H | ┢ | - | |
| | 110 | | _ | _ | | | \vdash | \vdash | | |
| | 111 | <u> </u> | | Г | | | | | | \neg |
| | 112 | | | | | | | | | |
| | 113 | | | | | | | | | |
| | 114 | L | <u> </u> | | \Box | | | $oxedsymbol{oxed}$ | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | |
| <u> </u> | 115 | Ь. | <u> </u> | \vdash | <u> </u> | oxdot | L | <u> </u> | <u> </u> | Щ |
| | 116 | <u> </u> | <u> </u> | ┡ | | <u> </u> | <u> </u> | L | L | Н |
| | 117 | ┞ | <u> </u> | ├ | | <u> </u> | <u> </u> | H | \vdash | Н |
| | 118 | ├ | | ├ | _ | H | ⊢ | | \vdash | Н |
| - | 119 120 | | | ⊢ | | \vdash | - | | \vdash | Н |
| <u> </u> | 121 | ⊢ | ⊢ | ⊢ | - | ├─ | ⊢ | - | \vdash | Н |
| | 122 | ┢ | ┢ | ┢ | | ┝ | ├ | - | \vdash | \vdash |
| <u> </u> | 122 123 | \vdash | ┢ | ┢ | - | \vdash | \vdash | | ┝ | Н |
| _ | 124 125 126 | | \vdash | \vdash | \vdash | Н | _ | 1 | \vdash | |
| | 125 | Ι- | | | | П | | | | |
| | 126 | | | | | | | | | |
| | 127 128 | | | | | | | | | |
| | 128 | | | <u> </u> | | | | | | |
| | 129 | Щ | | $ldsymbol{f eta}$ | | Ш | _ | $oxed{oxed}$ | | Щ |
| | 130 131 | ļ | | ⊢ | | | <u> </u> | L | Ш | Н |
| | 131 | <u> </u> | L | <u> </u> | \vdash | - | <u> </u> | <u> </u> | _ | щ |
| | 132 | | - | - | - | - | - | \vdash | \vdash | \dashv |
| | 133 134 | \vdash | \vdash | | \vdash | | \vdash | \vdash | Н | $\vdash \vdash$ |
| \vdash | 135 | \vdash | ┝ | H | \vdash | | - | \vdash | Н | \vdash |
| | 136 | \vdash | 一 | - | Н | | _ | | Н | Н |
| | 137 | Г | | Т | П | Т | | Г | П | \sqcap |
| | 138 | | | | | | | | | |
| | 138 139 | | | | | | | | | |
| | 140 | | | | | | | | | |
| Ш | 141 | | | L | \Box | | | $oxed{\Box}$ | Ш | Ш |
| lacksquare | 142 | <u> </u> | L | _ | | Ш | <u> </u> | \vdash | Ш | Ш |
| igdash | 143 | | H | L | - | _ | | \vdash | Н | Н |
| \vdash | 144 | <u> </u> | <u> </u> | - | \vdash | _ | _ | H | \vdash | $\vdash \vdash$ |
| $\vdash\vdash$ | 145 146 | \vdash | ├- | ⊢ | \vdash | \vdash | - | \vdash | Н | $\vdash \vdash$ |
| | 147 | \vdash | H | ⊢ | \vdash | \vdash | \vdash | - | \vdash | $\vdash \vdash$ |
| | 148 | \vdash | \vdash | ┢ | Н | \vdash | - | ┝─┤ | \vdash | $\vdash \vdash$ |
| | 149 | \vdash | Н | ┝ | H | H | \vdash | - | | Н |
| \vdash | 150 | H | Н | Н | Н | | _ | Н | Н | \vdash |
| | | | | _ | | | _ | _ | | |